

# Port Townsend Paper Corp. Notice of Construction Order 7850 Public Meeting & Public Hearing

Department of Ecology / Industrial Section

Bari Schreiner, hearing officer Carol Kraege, Ecology Waste 2 Resources section manager Marc Heffner, Ecology Industrial Section engineer August 17, 2010

# Agenda

• 6:30 p.m.

Introduction

Bari Schreiner/hearing officer

• 6:35

**Public Meeting** 

(Presentation/Q&A session)

Carol Kraege/ Ecology section manager

 Marc Heffner/Ecology Industrial Section engineer

Followed by:

**Public Hearing** 

(Formal testimony)

Bari Schreiner/hearing officer



# Tonight's Purpose

- Provide overview and receive comment on draft Notice of Construction (NOC) Order No. 7850
- Answer your questions.
- Accept formal comments.
  - Please sign up

We extended the comment period until 5:00 p.m. on August 23, 2010.



# Overview of tonight

- New Source Review
- How NSR applies to Port Townsend Paper Corp's (PTPC's) cogeneration project
- Notice of Construction Order No. 7850

Ecology will consider all comments to help evaluate if new source review rules and regulations for the proposed changes at the mill are properly considered in the order.

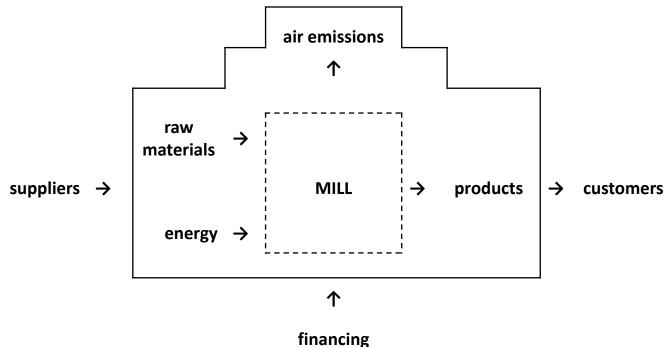
## What is New Source Review?

- New Source Review is:
  - The process used to consider all air emissions from new sources
  - Applies only to the changes being made
- A "new source" is any construction or modification that increases air emissions
- References:
  - WAC 173-400-030(52)
  - WAC 173-400-110



#### New Source Review cont.

Where do New Source Review rules and regulations apply?



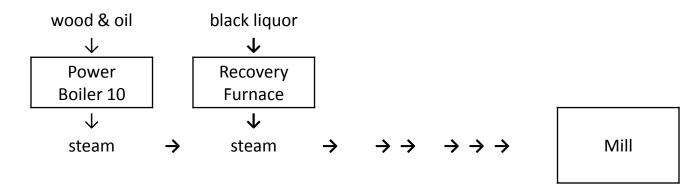
financing

- Changes in the solid box can be considered.
- •Changes outside the solid box are beyond the scope of the NSR process.

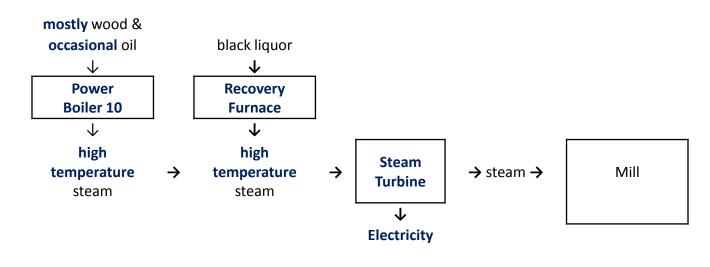


# Proposed changes at PTPC

#### **Current operations**



#### Proposed operations (changes in bold/blue)





# Air emissions analysis

- Calculate pre-project (current) air emissions "baseline"
- Estimate post-project emissions and research new emission control technology
- 3. Compare the difference
  - If no, or a very small, increase in emissions, permitting is minimal.
  - If medium increase, a Notice of Construction is required.
  - If large increase, a Prevention of Significant Deterioration (PSD) permit is required.

# Air emission analysis cont.

#### Chemicals included:

- Carbon monoxide (CO)
   Ozone (Volatile)
- Nitrogen oxides (NO<sub>x</sub>)
- Sulfur dioxide (SO<sub>2</sub>)
- Particulate matter (PM, PM10, PM2.5)
- Lead
- Total reduced sulfur (TRS)

- Ozone (Volatile
   Organic Compounds
   (VOCs) or nitrogen
   oxides)
- Fluoride
- Sulfuric acid mist
- Hydrogen sulfide (H2S)

Carbon dioxide is currently not part of the analysis. State rules are being updated to include it.

## **Notice of Construction**

#### A Notice of Construction application includes:

- Project description
  - Air emissions analysis
- Analysis determining which environmental rules and regulations apply
- A plan to comply with applicable rules and regulations



#### Notice of Construction cont.

- PTPC submitted application to Ecology May 2010.
- Ecology must\*:
  - Make initial completeness determination within 30 days of submittal.
  - Issue a final decision or begin public comment process within 60 days of determining application is complete.
  - Finalize the order as promptly as possible after the public comment period has ended.

\*WAC 173-400-110(6) & (7)



## Notice of Construction cont.

When application was received, we asked the following questions:

- Changes in air emissions?
  - Yes
- Prevention of Significant Determination permit necessary?
  - No (Ecology's Air Program review)
- Notice of Construction order necessary?
  - –Yes



#### What is a Notice of Construction Order?

- An Air Order issued by Ecology
- Sets enforceable conditions for the project, based on current rules and regulations



#### PTPC NOC Order No. 7850

- Introduction
  - Describes project and planned changes at mill
- Findings
  - Summarizes key information from the Notice of Construction application
  - A brief Ecology analysis
- Conditions
  - Sets limits and monitoring requirements the completed project must meet



## PTPC Order cont.

Where will changes occur? Will emissions increase?

Recovery Furnace	No
Power Boiler 10	Yes
Solid fuel handling system	Yes
Steam turbine and cooling tower	Yes



# Recovery Furnace

- Improved heat capture
- No changes:
  - In fuel type or amount
  - In emissions
  - To current permit limits and monitoring requirements



# Power Boiler 10

Parameter	Proposed Limit	Project +/- based on baseline	Project Control Measures
Carbon Monoxide	635 T/yr	+ 43 T/yr	overfire air and proper operation
Volatile Organic Compounds	18.1 T/yr	+ 1.1 T/yr	overfire air and proper operation
Particulates	36.4 T/yr	- 66.7 T/yr	dry electrostatic precipitator (ESP)
Nitrogen Oxides	262 T/yr	- 1.9 T/yr	selective non- catalytic reduction
Sulfur Dioxide	96 T/yr	- 2.0 T/yr	caustic addition



#### Power Boiler 10 cont.

Parameter	Projected Rate Project +/-		
Firing rate	414 MMBtu/hr	+ 97 MMBtu/yr	
Total			
Reduced	0.5 T/yr	no change	
Sulfur			

- Fuels remain wood and oil plan to use wood almost exclusively
- Increased firing rate main production benefit to PTPC
- Reduced PM emissions and improved emissions controls most notable environmental benefits
- No change expected in Total Reduced Sulfur (TRS)



## Power Boiler 10 cont.

#### Order conditions:

Parameter	Short Term Limit	Yearly Limit	Continuous Monitoring
Carbon monoxide	Х	Х	Х
Volatile Organic Compounds	Х	Х	
Particulate matter	Χ	Х	Χ*
Nitrogen oxides	Х	Х	Х
Sulfur dioxide	Х	Х	Х
Ammonia**	X		

<sup>\*</sup>Particulate or opacity monitoring

\*\*Used in nitrogen oxide control process



# Solid fuel handling system

- Modification of on site haul routes and storage piles
- Expected particulate matter (PM) increase of 5.7 tons/year of fugitive emissions
- Best management practices required to minimize emissions.



# Steam turbine and cooling tower

- New units
- No direct emissions from steam turbine
- Estimated 1.3 tons/year particulate matter (PM) emissions from cooling tower
- Demister required on cooling tower



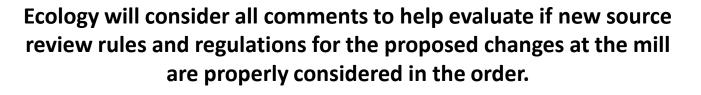
# Toxicity analysis

- Everything is toxic at some concentration (WAC 173-460)
- Steps taken:
  - 1. Compare toxic air emission estimates to *de minimus* amounts
    - No limit necessary for compounds with emissions less than de minimus
  - 2. Run SCREEN3 model for compounds greater than *de minimus* 
    - No limit necessary for compounds with SCREEN3 results less than acceptable source impact level (ASIL)
- Analysis met these criteria. No further steps needed and no limits necessary.



# Ecology's next steps

- 1. Public comment closes at 5 p.m., August 23, 2010
- 2. Review and consider all comments for possible changes to the order
- 3. Complete Response to Comments
- 4. Issue order





# Web page

Documents and information are posted on our webpage:

http://www.ecy.wa.gov/programs/swfa/industrial/pulp\_porttown.html



## Questions?

- Teddy Le, Interim Industrial Section manager
- Marc Heffner, Industrial Section engineer
- Angela Fritz, Industrial Section public involvement

# Send written comment by 5:00 p.m. on August 23, 2010 to:

Washington Dept. of Ecology Marc Heffner/Industrial Section PO Box 47600

Olympia, WA 98504-7600

Fax: 360-407-6102

mhef461@ecy.wa.gov



# Public Hearing Bari Schreiner, hearing officer

# Send written comments by 5:00 p.m. on August 23, 2010 to:

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